



NSAI
Standards

Irish Standard
I.S. EN 60335-2-27:2013&A1:2020&A2:2020

Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to ultraviolet and infrared radiation

I.S. EN 60335-2-27:2013&A1:2020&A2:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 60335-2-27:2013/A1:2020

EN 60335-2-27:2013/A2:2020

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NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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National Foreword

I.S. EN 60335-2-27:2013&A1:2020&A2:2020 is the adopted Irish version of the European Document EN 60335-2-27:2013, Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to ultraviolet and infrared radiation

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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EUROPEAN STANDARD

EN 60335-2-27:2013/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2020

ICS 13.120; 97.170

English Version

**Household and similar electrical appliances - Safety - Part 2-27:
Particular requirements for appliances for skin exposure to
ultraviolet and infrared radiation
(IEC 60335-2-27:2009/A1:2012 , modified)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-27: Règles particulières pour les appareils
d'exposition de la peau aux rayonnements ultraviolets et
infrarouges
(IEC 60335-2-27:2009/A1:2012 , modifiée)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-27: Besondere Anforderungen für
Hautbestrahlungsgeräte mit Ultraviolett- und
Infrarotstrahlung
(IEC 60335-2-27:2009/A1:2012 , modifiziert)

This amendment A1 modifies the European Standard EN 60335-2-27:2013; it was approved by CENELEC on 2020-02-12. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 60335-2-27:2013/A1:2020 (E)

European foreword

The text of document 61/4444/FDIS, future IEC 60335-2-27/A1, prepared by IEC/TC 61 "Safety of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60335-2-27:2013/A1:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-11-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-02-12

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s), see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60335-2-27:2009/A1:2012 was approved by CENELEC as a European Standard without any modification.

Annex ZZ
(informative)

Relationship between this European Standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Compliance with this Part 2 when used together with the Part 1 provides one means of conformity with the safety objectives.

Table ZZA.1 – Correspondence between this European Standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

| Safety objectives of Directive 2014/35/EU | Clause(s) / sub-clause(s) of this EN | Remarks/ Notes |
|---|--|----------------|
| 1 a) | Clauses 4, 7 | None |
| 1 b) | Clauses 4, 7 | None |
| 1 c) | Clauses 4, 7 | None |
| 2 a) | Clauses 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 | None |
| 2 b) | Clauses 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 | None |
| 2 c) | Clauses 6, 7, 11, 15, 17, 18, 19, 20, 21, 22, 24, 25, 30, 32 | None |
| 2 d) | Clauses 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 | None |
| 3 a) | Clauses 6, 7, 11, 17, 18, 19, 20, 21, 22 | None |
| 3 b) | Clauses 7, 11, 15, 19, 22, 25, 32 | None |
| 3 c) | Clauses 6, 7, 9, 10, 11, 14, 17, 18, 19, 21, 22 | None |

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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EUROPEAN STANDARD

EN 60335-2-27:2013/A2

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2020

ICS 13.120; 97.170

English Version

**Household and similar electrical appliances - Safety - Part 2-27:
Particular requirements for appliances for skin exposure to
ultraviolet and infrared radiation
(IEC 60335-2-27:2009/A2:2015 , modified)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-27: Règles particulières pour les appareils
d'exposition de la peau aux rayonnements ultraviolets et
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(IEC 60335-2-27:2009/A2:2015 , modifiée)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-27: Besondere Anforderungen für
Hautbestrahlungsgeräte mit Ultraviolett- und
Infrarotstrahlung
(IEC 60335-2-27:2009/A2:2015 , modifiziert)

This amendment A2 modifies the European Standard EN 60335-2-27:2013; it was approved by CENELEC on 2018-05-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 60335-2-27:2015/A2:2020 (E)

European foreword

This document (EN 60335-2-27:2013/A2:2020) consists of the text of IEC 60335-2-27:2009/A2:2015 prepared by IEC/TC 61 "Safety of household and similar electrical appliances", together with the common modifications prepared by CLC/TC/61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-10-24
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2023-04-24

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012 including its amendments and EN 60335-2-27:2013/A1:2020.

The principal changes in EN 60335-2-27:2013/A2:2020 as compared with EN 60335-2-27:2013/A1:2020 are as follows (minor changes are not listed):

- Extension of the scope from appliances for skin exposure to ultraviolet and infrared radiation to appliances for skin exposure using all kinds of optical radiation.
- Definition and labeling requirements for goggles.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60335-2-27:2009/A2:2015 was approved by CENELEC as a European Standard with agreed common modifications.

Common modifications

1 Scope

Replace the two dashed items in the fourth paragraph by:

- **children** playing with the appliance;
- the use of the appliance by **children**;

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this standard.

7 Marking and instructions

7.1

Add the following sentence as the first sentence of the warning before Note 102.

Not to be used by persons under the age of 18 years.

7.12

In the fourth paragraph of EN 60335-1:2012 delete the words “children aged from 8 years and above and”.

22 Construction

22.111

Replace in the note:

“lower value of Y range: $0,75 \times 3,2 = 2,40$ ” by “lower value of Y range: $0,75 \times 2,7 = 2,03$ ”

“upper value of Y range: $1,25 \times 3,2 = 4,00$ ” by “upper value of Y range: $1,25 \times 2,7 = 3,38$ ”

Replace in the paragraph of the note referring to the fluorescent UV lamps equivalency code range:

“(2,4-4,0)” by “(2,0-3,4)”.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60335-2-27

December 2013

ICS 13.120; 97.170

Supersedes EN 60335-2-27:2010

English version

**Household and similar electrical appliances -
Safety -
Part 2-27: Particular requirements for appliances for skin exposure to
ultraviolet and infrared radiation
(IEC 60335-2-27:2009, modified)**

Appareils électrodomestiques et
analogues -
Sécurité -
Partie 2-27: Règles particulières pour les
appareils d'exposition de la peau aux
rayonnements ultraviolets et infrarouges
(CEI 60335-2-27:2009, modifiée)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke -
Teil 2-27: Besondere Anforderungen für
Hautbestrahlungsgeräte mit Ultraviolett-
und Infrarotstrahlung
(IEC 60335-2-27:2009, modifiziert)

This European Standard was approved by CENELEC on 2013-05-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

This document EN 60335-2-27:2013 consists of the text of IEC 60335-2-27:2009 prepared by IEC TC 61, "Safety of household and similar electrical appliances", together with the common modifications prepared by the Technical Committee CENELEC TC 61, "Safety of household and similar electrical appliances".

EN 60335-2-27:2013 is based on IEC 60335-2-27:2009, modifying it to fulfil the SCCP requirements for these appliances and to incorporate existing common modifications and interpretation statements.

The following dates are fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-06-13
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-11-21

This document supersedes EN 60335-2-27:2010.

The principal changes in EN 60335-2-27:2013 as compared with EN 60335-2-27:2010 are as follows (minor changes are not listed):

- clarification of the radiation measurement procedure (32.101);
- guidelines for an exposure time schedule (Annex DD).

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement Notice

The text of the International Standard IEC 60335-2-27:2009 was approved by CENELEC as a European Standard with the following agreed common modifications:

COMMON MODIFICATIONS

Introduction

Add after the second paragraph:

This standard covers appliances used for intentional tanning. Irradiance limit values are not to be used as safety guidelines for non-intentional UV-exposure.

Add after the seventh paragraph:

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 2006/95/EC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 2006/42/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

6 Classification

Replace 6.101 by:

6.Z101 Appliances shall be one of the following types with respect to the type of ultraviolet radiation:

- **UV type 1 appliance;**
- **UV type 2 appliance;**
- **UV type 3 appliance;**
- **UV type 4 appliance.**

Compliance is checked by inspection and by the relevant tests.

NOTE **UV type 1 appliances** and **UV type 2 appliances** are intended to be used in tanning salons, beauty parlours and similar premises, under supervision of appropriately trained persons.

UV type 3 appliances are suitable for household and similar use and may be used by unskilled persons. They are also suitable for use in tanning salons, beauty parlours and similar premises **UV type 4 appliances are only to be used following medical advice and only intended to be used in tanning salons, beauty parlours and similar premises, under supervision of appropriately trained persons, and not for household use**

7 Marking and instructions

7.1 Replace the first paragraph by:

Appliances having **UV emitters** shall be marked with the appropriate UV type number in the following form:

UV type X

NOTE Z101 X is replaced by the appropriate number.

Add after Note 102:

UV type 4 appliances shall be marked with the substance of the following:

WARNING: Only to be used following medical advice.

Delete 7.6

7.12 Addition:

Replace the fifth bullet point by:

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